# بسم الله الرحمن الرحيم

والحمد لله رب العالمين والصلاة والسلام علي أشرف المرسلين سيدنا محمد النبي الأمي الهادي الأمين وعلي آله وصحبه أجمعين ...

#### وبعسد

والله إني أحبكم في الله ....

وأدعو الله أن يجمعنا بهذا الحب في ظل عرشه يوم لاظل إلا ظله

فهذا تلخيص مختصر لأهم موضوعات الروماتولوجي (المختصر المفيد) راجيا من الله سبحانه وتعالي ان ينفعنا واياكم به وأن يكتب لنا ولكم النجاح في الدنيا والأخرة وأن تكون علم ينتفع به لكل من نشرها..

ولنعلم جميعا أن النجاح هو رزق من الله سبحانه وتعالي يهبه لمن يشاء وقتما يشاء. ولكن هو فقط من باب الأخذ بالأسباب..

والشكر موصول لكل من:

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الذين أنجزوا هذه الورقات بمنتهي السرعة والتفاني والحب في الله .... ولولاهم بعد فضل الله ورحمته ما فعلت شيئا (فجزاهم الله خيرا)

أخوكم د. محمد السعيد

# Systemic Lupus Erythromatosus

# **DIAGNOSTIC CRITERIA OF SLE:**

- 1- Malar rash.
- 2- Discoid rash.
- 3- Photosensitivity.
- 4- Oral ulcers.
- 5- Arthritis.
- **6- Serositis**: (pleurisy, pericarditis.)
- **7- Renal** : ( proteinuria & casts.)
- **8-Blood**: hemolytic anemia,  $\downarrow$  WBC,  $\downarrow$  lymphocytes and  $\downarrow$  Platelets.
- 9- Neurology: Seizures & psychosis.
- **10- Immunological:** Anti-DNA Ab, Anti-Smith Ab, Anti-phospholipid and fasle positive test for syphilis .
- 11- ANA.

# <u>N.B</u>

**SLE** is considered if 4 +ve signs from 11 criteria.

### **C/P:**

- FAHM.
- CVS  $\rightarrow$  pericarditis.
- Pulmonary  $\rightarrow$  pleurisy.
- Neurology → Chorea, psychosis.
- Blood  $\rightarrow$  anemia, purpura, infections.
- Kidney  $\rightarrow$  GN, NS.
- Skin → Malar rash, Discoid rash.
- Joints → Arthralgia, Arthritis.

# **Investigations:**

- ANA  $\rightarrow$  Sensitive screening test.
- Anti-ds DNA → specific for SLE.
- Renal biopsy.

#### **TTT:** It depends on affected organs & severity:

- Avoid sun exposure.
- **Topical steroids** (discoid rash.)
- **NSAID**  $\rightarrow$  for arthritis.
- Anti coagulants (heparine, warfarine) for treatment of thrombosis.
- Corticosteroids .

(severe cases): pulse methyl prednisolone 30 mg/kg/dose for 3 days (systemic disease): 1-2 mg/kg/day

- Cytotoxic drugs:
  - Cyclophophamide
  - Azathioprine.
  - Methotrexate.
- **IVIG**, pasmapheresis.
- **Treatment of compilation**  $\rightarrow$  RF, seizures, HTN, infections.



# **Lupus nephritis**

# Class I:

No histological abnormalities.

No C/P, No treatment.

# Class II: Mesengial lupus nephritis.

L/M: mesengial proliferation.

E/M: mesengial deposits.

C/P: hematuria, proteinuria.

ttt: prednisone 1-2 mg/kg/day → tapering.

## Class III: Focal segmental L.N.

L/M: focal segmental Mesengial proliferation, crescent formation.

E/M: mesengial deposits.

C/P: hematuria, proteinuria.

ttt: as II

### **Class IV: diffuse proliferative LN:**

L/M: All glomeruli shows mesengial proliferation , crescent formation.

E/M: mesengial deposits.

C/P: hematuria, proteinuria, renal insufficiency.

ttt: Prednisolone & Cyclophosphamide and Azathioprine.

## Class V: (membranous glomerulopathy.

L/M: Thickening of glomerular BM.

E/M: sub epithelial deposits.

C/P: nephrotic syndrome.

 $ttt \rightarrow steroids + chlorampucil.$ 

### N.B:

 $\underline{\textbf{Deposits}} = \textbf{Ig} + \textbf{complement} \dots \underline{\textbf{Proliferation}} = \uparrow \textbf{cells} + \uparrow \textbf{matrix}$ 

# **Juvenile Rheumatoid Arthritis**

# **Def:**

it's a common rheumatic disease of children → causes disability, blindness)

# pathology:

- A) arthritis: (synovitis, effusion, cartilage, bone destruction.
- B) pleurisy, pericardiotis.

## **Diagnostic criteria:**

- 1- age < 15 years
- 2- for 6 wks at least ( مهمة جدا )
- 3- Arthritis:

#### 1- Oligo arthritis:

Affect LL.

A symmetrical.

Hip is not involved.

ANA  $\rightarrow$  is positive.

#### 2- Poly arthritis:

Affect UL, LL.

Symmetrical.

Hip is not involved.

ANA is positive.

### 3- Systemic:

Daily fever (spiky)  $\geq 2$ wks.

macular rash.

hypersensitivity to trauma.

hip joint is involved.

↑ ESR, +ve ANA.

# **Investigations:**

- Lab:
  - CBC :  $\downarrow$  RBC,  $\uparrow$  WBC,  $\uparrow$  platelet.
  - ↑ CRP, ESR.
  - ↑ ANA , RF.
- Imaging:
  - Slit lamp examination for uveitis.
  - X-ray  $\rightarrow$  soft tissue swelling.
- Examination of synovial fluid: ↑ PNLS

# **Complications:**

- Chronic uveitis.
- Chronic joint deformities.
- Short stature.
- Osteoprosis.
- Complications of ttt. (NSAID)

# Golden rule

شخص مبكرا & عالج كويس وبعنف اذا اقتضي الأمر لكن خد بالك من الاثار الجانبية والمضاعفات .. Diagnose early, treat efficiently, be aggressive if indicated, don't forget side effects..

# TTT:

#### 1- NSAID:

Anti cox I (Ibuprofen)  $\rightarrow$  analgesic, anti-inflamatory.

Anti cox II (Paracetamol)  $\rightarrow$  less side effects.

#### 2- Hydroxychloroquine:

It's antimalarial  $\rightarrow$  modify the nature of the disease.

SE: retinal toxicity.

#### 3- Sulfasalazine:

Used as anti-inflammatory.

#### 4- Methotrexate: It's corner stone of ttt of rheumatic diseases

لم يعد يستخدم ( الجرام ب ٥٠٠ جنيه ههههههه ) 5- Gold:

#### **6- steroids:**

- Pulse therapy: methyl prednisolone 30mg/kg/dose.
- Used until reach the effect of methotrexate
- Used intra articular in oligo-artheritis

#### **7- Physiotherapy:**

**<u>8- Orthopedic surgery:</u>** for correction of deformities

اعلموا أحبابي الكرام ...
أن نتيجة الامتحان مكتوبة في اللوح المحفوظ قبل أن تخلق السموات والارض بخمسين ألف سنة كما أخبر بذلك نبينا المصطفي .. والمذاكرة فقط من باب الأخذ بالاسباب ... لكن النجاح محض فضل من الرب سبحانه وتعالي يهبه لمن يشاء وقتما يشاء

# Juvenile dermatomyositis

## **Def:**

Chronic inflammatory disease CCC by small vasculitis of skin, muscles.

# **C/P:** (skin, muscles, others.)

#### 1- Skin:

- Helioterope rash in upper eye lid → (purplish color معناها)
- Facial rash.
- V- sign of skin of chest. زي اللي في الجيش هههههه
- Partial baldness, facial edema.

#### 2- Muscles:

- Skeletal: proximal ms. Weakness.
- Smooth: constipatim, dysphagia.
- cardiac: Cardiomyopathy.

#### 3- Other:

- G.I.T  $\rightarrow$  Ulcers, perforation.
- HSM.
- Renal impairment.

# **Investigations:**

- Muscle enzymes  $\rightarrow \uparrow$  AST
- Muscle biopsy.
- EMG  $\rightarrow$  irritability.
- MRI → Vaculitis.

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# TTT:

- Prednisolone 1-2 mg/kg/day <u>or</u> pulse therapy (Methylprednisolone)
- Methotrexate: 10 15 mg/kg/day.
- Cyclophosphamide.
- Physiotherapy.

# **DD** of arthritis

- 1- Truma.
- **2- Metabolic :** ( gouty arthritis .)
- **3- Blood**:

hemophilia, leukemia sickel cell anemia.

#### 4 - Malignancy:

lymphoma, leukemia

#### 5- Rheumatic:

rheumatic fever.

juvenile rheumatoid arthritis.

SLE, dermatomyositis.

IBD.

henoch-shonlin perpura.

#### 6 - Infections:

septic arthritis
osteomyelitis
toxic synovitis of the hip joint
reactive arthritis after bacterial infection

# **Scleroderma**

# **Def:**

chronic inflamatory disorder caused by deposition of collagen & fibrosis (in lung, skin, GIT, heart, kidney, joints).

# <u>C/P</u>:

#### 1- skin:

finger: swallen, limited mobility.

face: mask face.

**f**ish mouth.

<u>feet</u>: contracture of joints.

### 2- C.V.S:

Raynoud's phenomena: pallor ---> cynosis ---> redness.

hypertension.

Cardiomyopathy

### 3 - Lung:

Pleurisy.

interstatial lung disease.

#### 4 - GIT:

Dysphagia.

malabsorption.

### **5 - kidney :**

2ry renal hypertension

heamatoria.

proteinuria.

### **6 - Joints:** arthritis.

# **Investigation:**

- anti scl 70.
- increase v.w. factor.
- chest x-ray.
- heart x-ray.
- pulmonary function tests .
- kidney function tests .

# **TTT:-**

- topical steriods.
- systemic steriods .
- physiotherapy.
- treatment of Raynoud's phenomena



# **Amyloidosis**

# **Def:**

chronic inflamatory disease affecting many organs due to deposition of amyliod material in tissues ( two type AA - AZ ) .

### <u>C/P :-</u>

#### **1-Renal** :

- nephrotic syndrome.
- protienoria.
- renal insufficiancy.
- 2 Heart: heart faliur heart block.
- <u>3- C.N.S</u>: free!!!!! but sensory and autonomic neuropathy.

#### 4- GIT:

- Macroglossia.
- malabsorption.
- hepatomegaly (common)
- splenomegaly ( rare )

#### **Investigations:**

- Biopsy and staining with Congo Red stain.
- Evaluation of Renal functions.

#### TTT:

- ttt of JRA.
- ttt of FMA.



# Familial Meditrnian Fever

## **Def:**

AR disease due to mutation of FMA gene, There are >50 known mutations.

### **<u>C/P</u>**: Acute episodes of :

- Fever.
- Synovitis: arthralgia, arthritis.
- Serositis: pleurisy, pericarditis, peritonitis.
- Others: HSM, Skin rash.

# **Investigations:**

- Genetic study : 5\_10 mutations one usually screened.
  - Picture of amyloidosis.

### TTT:

- Colchicine : decrease attacks ,decrease development of amyloidosis.
- ttt of complications as renal dialysis ,renal replacement.



حمي البحر المتوسط لازم تكون في دماغك في كل طفل بيشتكي من آلام متكررة وشديدة في البطن لأن ساعات كتير بتشخص علي انها زايدة،،،،، ويعمل العملية فعلا ... ويفضل الالم مستمر فتتشخص علي انها مرارة ،،،،،، ويعمل العملية فعلا ... لكن الألم يأبي أن يذهب ... فير وحوا لحضرتك تشخصها علطول ،،،،،،بس بعد مايكون فات الاوان فيههههه هكذا قال الفهامة أحمد رجب ...

# **Perioidic Fever Syndrome**

# **Def:**

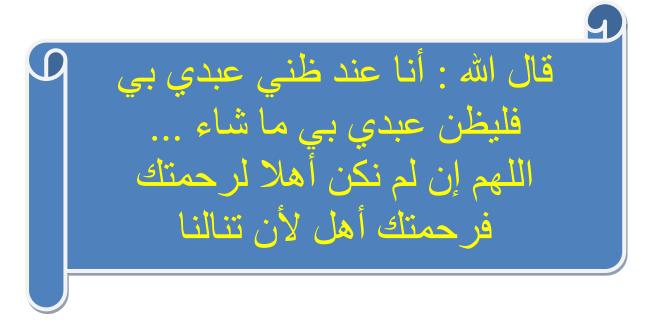
Self limited genetic disease characterized by recurrent episodes of fever and inflammatory manifestations.

# **Classification:**

- FMF.
- Tumor necrosis factor receptor associated periodic syndrome.
- periodic fever.
- pharyngitis, L.N.

## C/P:

- acute episodes of variable combinations of:
- fever.
- artheralgia / arthritis.
- abdominal pain, chest pain.
- conjuctivities LN, skin rash.



# Henoch\_Schonlien Purpura

## **Def:**

small vessel vasculitis affecting skin, GIT, joints and kidney.

## **Etiology**:

Post infectious group A streptococci.

## **C/P**:

**Skin**: Purpuric eruption in LL, buttocks.

**GIT**: Abdominal pain , hematemesis , bleeding per rectum. .

**Joints**: Artheritis in knee, ankle.

Kidney: Hematuria, protinuria.

# **Invesigations**:

-CBC; anuria, ↑ ESR.

-Urine analysis, KFT.

-Skin biopsy: Ig A deposition .

## TTT:

-NSAID: for pain & fever.

-Steroids.

-ttt of complications.

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# **Takayasou arthritis**

# **Def:**

large vessels arthritis affecting aorta and its major branches.

Pathology: Pan arthritis (stenosis, aneurysm)

# **C/P:**

- FAHM
- Weak pulse
- Ischemia of renal artery.
- Cardiomyopathy

# **Investigation:**

- **CBC** : anemia ,↑ ESR.
- Echocardiography.
- Dopler, MRA.

# **TTT:-**

- Steroids.
- Cyclophosphamide. .
- Methotrexate..
- TTT of complications (HTN,HF.)
- Aortic aneurysm : surgery.\_



# Polyarthritis Nodosa

**<u>Def:</u>** medium sized vasculitis.

**Etiology**: Post infectious ( HBS,HCV,TB,CMV)

# **C/P:**

- Skin : purpura ,rash ,Reynauds phenomena

- Arthritis

**- GIT** : abdominal pain , bleeding.

- Nephritis: proteinuria, hematuria.

# **Investigations:**

- CBC (anemia, ↑ESR)
- Dopler ,MRA ,angiography.

## TTT:

- Steroids.
- Cyclophosphamide.



# (حبیبی کوازاکی Kawasaki Disease

### **Def:**

Febrile medium sized vasculitis with affinity to coronaries arteries.

### **Etiology:-**

- Genetic
- Post infectious.

### **Diagnostic criteria:** Fever $\geq 5 \text{ day} + 4 \text{ From 5 of}$ :

### تذكر انه تجمعها كلمة كرشه ههههههه (CRSHA)

- Congestion of conjunctiva ( not MPC.)
- **R**ash (pleomorphic) mainly on trunk.
- Strawberry tongue & pharyngitis.
- $\underline{\mathbf{H}}$  and & foot desquamation & edema .
- $\underline{\mathbf{A}}$ denopathy LN  $\geq 1.5$  cm.

#### Others:

- CVS:50% coronary aneurysm.
- CNS: irritability & meningitis.
- GIT: abdominal pain & hepatitis.

### **D.D:**-

- measls, scarlet fever, SOJRA.
- EBV infection.
- Toxic shock syndrome.



# **Investigations:**

- CBC: anemia ,thombocytosis (in thousands)
- ↑ CRP ,ESR.
- ↑ Liver enzymes
- CSF: pleocytosis.
- **Echocardiography**→if coronary more than 3mm→ aneurysm coronary
- Angiography.

## **TTT:-**

- **IVIg**: 2gm/kg over 12 hours.
- asprin: 100 mg / kg /day (2weeks)
- -TTT of thrombosis: (urokinase, streptokinase.)
- **regular follow up** (echo , angiography ,stent , bypass.)
- pulse methylprednisone in resistant case
- Mortality = 0.01% in jaban.

دي نسبة الوفيات في اليابان ( %0.01 ) يعني واحد في الالف ...

زي عندنا بالطبط ...

تحيا ماسر ...

وفي الختام....
لا تنسوا كل إخوانكم الذين قاموا بكتابة هذه الكلمات من دعوة بظهر الغيب في سجودكم لعل الله أن يتقبل من واحد فقط منكم فيكرمنا جميعا من أجله ....